

Product datasheet for **MG221523**

L3mbtl1 (NM_001081338) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	L3mbtl1 (NM_001081338) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	L3mbtl1
Synonyms:	C630004G01; L3mbtl; mKIAA0681
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>MG221523 representing NM_001081338
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGGGGCACACTGACATGGAGATACTAAGGACAGTAAAAGGGTCTTCCACAGGGGAGGTCAACGTGC
 ACCTGGTGGCCAGAGACAGCGCAGGTCCCCACCCTCAGCTGCCTACAACCGCCTTCAATTATTCCTACCAA
 TGCAGCTACGCTTGGTCTGCCTAGCACTGCCCTGGATGTGCCCTATCCCCGGGAGCCAGTCCACGTGGGT
 GCCCTGGAGCGGGTGGCTGGCAGCGAACCCGTAACAGCTACTATTCTGCCACAGCTAAGCACTGGAACGG
 GGACCAATAGCACAGTCAGGCTTCTGGATTGGACTGGCGTTTCTGCACCTTTACCTGGTAGCGGCATGCG
 GTTCCGGATAAATGAGTACGCGCCACTGAACATGATAGGAGTGGAGCGACCACGAAGCCCGGAGCAGCGA
 CATGAGGGTGGCATGGCCAGGAGAGATGCGGGCATCCAGCACCTGATGTTACCAGGACCGTCAAGATA
 TAACTTCTCTGGAACCCCGGTAGATGCGAGTTCTCTGCAAGTCCAGGCTTGTGGCCTCAACAAAGTAG
 TGGCCTAGACGTTGGTTCATCGGGAGACCGATGCTCTCAGCCTTCCAGAAGCGGTCACTATAGTAGAG
 AACTCAGGCTGTACCATCGCTTCTGAGCTCTGAAACCCATGAAAAAGAGGAAACATAAGGAGTATCAGA
 GCCCATCAGAGGAGTCAGAGCCGGAGGCTGTGAAGCAAGGAGAAGGAAAAGACGCAGAGCGAGAGCCAC
 CCCTAGCACCCCGGAGAAATGAAGAGTGGAGCAGAAGCCAGCTGGTGTCCAGTGAGAAGAAGGACGGCTGG
 TCCTGGGAGTCCCTACCTGGAGGAGCAGAAGGCCGTACAGCCCCAGTTAGCCTCTTCCAGGACTCCCAGG
 CAGTCAACCATAACAAGAATGGCTTCAAACCTGGGCATGAAGCTGGAAGGCATTGACCCCCAACCCCGTC
 AATGTACTTATCCTCACTGTGGCTGAGGTGTGTGGCTACCGCTGCGCTGCACCTTGTGACTACTCT
 GAGTGCCACGACTTCTGGTCAATGCCAAGTCCCTGATATTATCCCGCTGGCTGGTGTGAGAAGACTG
 GACACAAGCTGCAGCTTCCCAAAGTTACAAGGAAGAGGAGTTCAGCTGGAGCCAGTACCTGGCCAGCAGC
 GAAAGCTCAGGCAGCCCCAAGCACCTGTTTGTAAAGCCAGAGCCACAGTACTCCACCTGTGGGCTTCCAG
 GTGGGCATGAAGCTGGAAGCTGTGGACCGCATGAACCTTCCCTCGTGTGTGGCCAGTGTGACCGATG
 TGGTGGACAGTCGCTTCTGGTGCACCTTGTGACTGGGGCGATACTTACGACTACTGGTGTGATCCAG
 CAGCCCCACATCCACCCAGTAGGCTGGTCCAGAAGCAAGGAAAGCCGCTCACCCCTCCACAAGACTAC
 CCAGACCCTGACAGCTTCTGCTGGGAGAAATATCTAGAAGAACTGGGACCTCGGCTGTGCCAATTGGG
 CCTTCAAAGTGCACCCCTCACAGCTTCTGGTGAACATGAAGCTGGAGGCTGTAGACCGCCGAAACCC
 AGCACTGATCCGGTAGCCAGTGTGGAAGATGTGGAGGATCATCGGATAAAGCTCCACTTTGATGGCTGG
 AGTCACAATTATGATTTCTGGATTGATGCCGATCACCCAGACATCCACCCTGCAGGCTGGTGTCCAAGA
 CAGGACATCCCCTGGAGCCTCCTCTCCGGCCAGAGAGTCCAGCTCTGTCTCCCCTGGGGGATGCCCCCT
 TCTCAGCCACAGGAGCCACCCACACAAGACCTCCAAATATAACTTTACCACCGAAAGTGCCCCACT
 CCTGGCTGTGACGGCTCCGGCCATGCACTGGCAAGTTCACAGCTCACCATTTGCCTCTCTGGCTGCCCGC
 TGGCCGAGAAAAACCAGAGCCGGCTGAAAGCGAACTGTCCGACTCGGAGACCGCAGCCAGGAAGAAGAA
 CCCGTCTAATTTGTCCCAAGGAAAAAGCCTCGCCATCAAGGCCGGATTGGACGCCCTCCAAAGTATCGC
 AAGATCCAGAAGAAGATCTCCAAGCCCTCCCTCCAGTGTGGTACACCAGTCCCTTTCATGTCCACCT
 TGCCGACCCACGCTGATCGCCACTCTGTGTGCTGGGAGCAACTGCAAGCTGTTGCCAGGAGTGGC
 GGGCATCTCAGCCTCCACAGTCTAAGTGGACCATTGAAGAGGTCTTTGGCTTCGTTCCAGACCTTGACG
 GGCTCTGAGGACCAAGCGCCCTTCAAAGACGAGATGATTGACGGCGAGGCCCTTCTTTTGTGACAC
 AGGCGGACATTGTGAAGATCATGAGTGTCAAGCTAGGCCAGCCTGAAGATCTATAACGCCATTTCAT
 GTTCAAAAACACTGACGATGCCTTAAAG

ACCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG221523 representing NM_001081338
 Red=Cloning site Green=Tags(s)

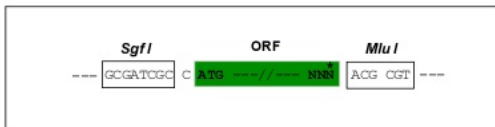
MEGHTDMEILRTVKGSSTGEVNVHLVARDSAGPHPQLPTTAFIIPNAATLGLPSTALDVPYPREPVHVG
 ALERVAGSEPVATILPQLSTGTGTNSTVRLDWTGVSAPLPGSGMRFRINEYAPLNMIGVERPRSPEQR
 HEGMARRDAGIQHPDVHQDRQDITSLEPPVDASSCKCQACGPQQSSGLDVGSSGDRCSQPFQKRSVIVE
 NSGCTIASELLKPMKKRKHKEYQSPSESEPEAVKQGEKDAEREPTPSTPENEEWSRSQLVSEKKDGW
 SWESYLEEQAVTAPVSLFQDSQAVTHNKNGFKLGMKLEGIDPQHPSMYFILTVAEVCGYRLRLHFDGYS
 ECHDFWVNANSPDIHPAGWFEKTGHKLQLPKGYKEEF SWSQYLRSTKAQAAPKHLFVSQSHSTPPVGFQ
 VGMKLEAVDRMNPSLVCVASVTDVVDSRFLVHFDDWGDYDYWCDPSSPYIHPVGWCQKQKPLTPPQDY
 PDPDSFCWEKYLEETGTSAPVNWAFKVRPPHSFLVNMKLEAVDRRNPALIRVASVEDVEDHRIKLHFDGW
 SHNYDFWIDADHPDIHPAGWCSKTGHLEPPLRPRESSVSPGGCPPLSHRSPHTKTSKYNFHHRKCPT
 PGCDGSGHVTGKFTAHHCLSGCPLAEKNQSRLKAELSDSETAARKKNPSNLSPRKKPRHQGRIGRPPKYR
 KIPEEDLQALPPSVVHQSLFMSTLPTHADRPLSVCWEQHCKLLPGVAGISASTVSKWTIEEVFGFVQTLT
 GSEDQARLFDKDEIDGEAFLLLQADIVKIMSVKLGPAKLIYNAILMFKNTDDAFK

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Kozac
Consensus

EcoRI BamHI KpnI RBS SgfI AscI

CTATAGGGCGGCCGGGAATTCGTGACTGGATCCGGTACCGAGSAGATCTGCCGCCGATCGCCGGCGCCAGATCT

HindIII NheI RsrII MluI NotI XhoI GFP Tag

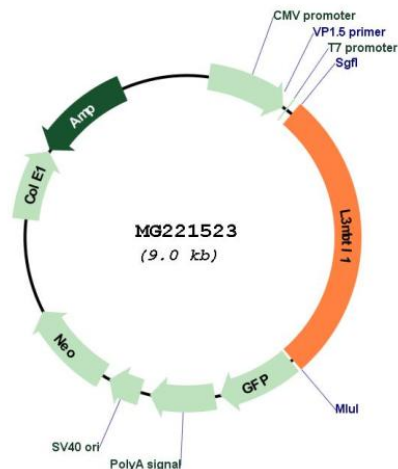
CAAGCTTAACTAGCTAGCGGACCG ACG CGT ACG CGG CCG CTC GAG ATG GAG AGC GAC --- --- ---

T R T R P L E M E S D - - -

PmeI FseI

--- --- GAA GAA AGA GTT TAA ACGGCCGGCCGGGAGCT

- - - E E R V Stop

Plasmid Map:


ACCN: NM_001081338

ORF Size: 2478 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001081338.2](#)

RefSeq Size: 2733 bp

RefSeq ORF: 2481 bp

Locus ID: 241764

UniProt ID: [A2A5N8](#)

Cytogenetics: 2 H2

Gene Summary: Polycomb group (PcG) protein that specifically recognizes and binds mono- and dimethyllysine residues on target proteins, thereby acting as a 'reader' of a network of post-translational modifications. PcG proteins maintain the transcriptionally repressive state of genes: acts as a chromatin compaction factor by recognizing and binding mono- and dimethylated histone H1b/HIST1H1E at 'Lys-26' (H1bK26me1 and H1bK26me2) and histone H4 at 'Lys-20' (H4K20me1 and H4K20me2), leading to condense chromatin and repress transcription. Recognizes and binds p53/TP53 monomethylated at 'Lys-382', leading to repress p53/TP53-target genes. Also recognizes and binds RB1/RB monomethylated at 'Lys-860'. Participates in the ETV6-mediated repression. Probably plays a role in cell proliferation. Overexpression induces multinucleated cells, suggesting that it is required to accomplish normal mitosis (By similarity).[UniProtKB/Swiss-Prot Function]